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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/539,431

06/20/2005

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EXAMINER

ASHRAF, WASEEM

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/539,431	Applicant(s) GUILLOTET ET AL.	
	Examiner WASEEM ASHRAF	Art Unit 2155	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 June 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 June 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|----------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>06/20/2005</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is a responsive to the application filed on 06/20/2005.
2. Claims 1-12 are pending and have been examined.
3. The claims are directed toward a device, and a process of adjusting bit rate using RTCP protocol parameters on the receiving side.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 1, 10, and 12, the phrase “writing stream adjustment cues” is indefinite for failing to particularly point out and distinctly claim the subject matter. It is not clear to the examiner what applicant means by cues.

In claim 6, the phrase “several successive variations” is indefinite for failing to particularly point out and distinctly claim the subject matter. It is not clear to the examiner what applicant means by this phrase; When the delay induced by the device is included in return report of RTCP, the receiver is already causing the bit rate to vary, and depending on the delay caused by the network congestions at different times the DLSR will vary each time it is calculated based

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on different traffic situation. It is not clear that the claim language is pointing out to this fact, or the claim language is referring to changing the DLSR manually.

In claim 7, the phrase “rate of sharing of the capabilities of the receiver” is indefinite for failing to particularly point out and distinctly claim the subject matter. It is not clear to the examiner what applicant means by this phrase.

Claims 2-5, 8-9, and 11 are rejected based on the rejected base claims 1, 10, and 12.

Claim Rejections - 35 USC § 101

6. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

7. Claims 12 is rejected under 35 U.S.C. 101 because the claimed subject matter is not directed to a legally recognized process, machine, manufacture, or composition of matter as required by § 101.

Claim 12 refers to a computer program product, the specification (Pg. 11, lines 16-22) discloses “the expression “computer program product” is understood to mean a computer program medium, which may consist not only of a storage space containing the program, such as a diskette or a cassette, but also of a signal, such as an electrical or optical signal.” Signal is not directed to a legally recognized process, machine, manufacture, or composition of matter as required by § 101.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 1-4 and 6-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Watanabe et al. (US 2001/0004352 A1)

Watanabe teaches the invention as claimed including a data receiving terminal, if a received-data of a particular time section received from a data sending terminal does not satisfy a predetermined accumulation quality as the result of discrimination by a received-data quality discriminating section, an alternative-data sending requesting section requests a data sending terminal for alternative data. (See abstract)

Regarding claims 1, 10 and 12, Watanabe teaches a device, a process and a computer program product for the adjustment of the bit rate of a stream of contents as a function of processing capabilities of at least one receiver (Fig. 1 teaches receiving terminal 3), the contents being transmitted by a sender to the receiver via a network (Fig. 1 teaches network 4), according to a communication protocol providing for a return transmission of reception data of the contents by the receiver to the sender (Pg. 2, paragraph 0021 teaches RTCP protocol providing return transmission of reception data), the device comprising : **a module for inputting information relating to the capabilities** (Fig. 5 teaches a received-data quality discriminating section that

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has expected quality information of the device (device capabilities)), **a module for estimating a required level for the bit rate at least as a function of the information** (Fig. 5 teaches less-than-estimated –quality receiving –data accumulating section 35'), **and a module for writing stream adjustment cues that is intended to write the adjustment cues for return transmission with the reception data to the sender** (Fig. 5 teaches a differential-data-request information accumulating section 39) , **the adjustment cues being capable of bringing about a modification of the bit rate in relation to the required level** (Fig. 12 teaches Receive RR that contains delay time between receive RR time of the device and send RR time of the device), **wherein the communication protocol** (Pg. 5, paragraph 0079 teaches RTCP) **providing for a return transmission to the sender of at least one parameter relating to conditions of communication of the contents in the network between the sender and the receiver** (Fig. 12 teaches RR parameter of RTCP protocol), **the writing module is intended to modify the parameter in such a way as to use it to transmit the adjustment cues** (Fig. 12 teaches modifying RR to send message 113 that includes time of sending at terminal A plus the delay induced at the terminal B)

Regarding claim 2, Watanabe teaches the limitation as described in claim 1 above, and further discloses **wherein the communication protocol is the RTCP protocol** (Pg. 5, paragraph 0079 teaches using RTCP protocol)

Regarding claim 3, Watanabe teaches the limitation as described in claim 1 above, and further discloses **wherein the parameter of the protocol is intended to serve to calculate a**

round trip transmission delay between the sender and the receiver (Pg. 2, Paragraph 0021 teaches measuring round trip delay time by using parameters SR/RR of RTCP protocol)

Regarding claim 4, Watanabe teaches the limitation as described in claim 3 above, and further discloses **wherein the parameter of the protocol comprises a delay introduced at the receiver between a moment of reception of the contents and a moment of sending of the reception data by the receiver** (Fig. 12 teaches sending RR message that includes delay introduced at receiving terminal between the reception of message 112 and sending of the message 113)

Regarding claim 6, Watanabe teaches the limitation as described in claim 1 above, and further discloses **wherein the writing module is capable of modifying the parameter by means of several successive variations of the parameter** (Fig. 5 teaches network interface section 31 that sends the RR report that contains modified parameter. Depending on the network and device condition it will be varied to adjust to the required rate)

Regarding claim 7, Watanabe teaches the limitation as described in claim 1 above, and further discloses **wherein the estimating module is capable of determining a value to be attained for the bit rate of the stream of contents also as a function of a rate of sharing of the capabilities of the receiver** (Fig. 5 teaches section 35' that is capable of determining the required rate of the content based on the expected quality information)

Regarding claim 8, Watanabe teaches the limitation as described in claim 1 above, and further discloses **wherein the input module and estimation module are designed so that the processing capabilities of the receiver comprise at least one criterion of the performance of the receiver chosen from among a data processing speed, a memory volume, an energy consumption and a presence of components dedicated to the processing of the contents** (Pg. 1, paragraph 16 teaches lowering sending rate; which reflects the performance capabilities of the receiving device)

Regarding claim 9, Watanabe teaches the limitation as described in claim 1 above, and further discloses **wherein it comprises a device for adjusting bit rate in accordance with claim 1** (Fig. 5 teaches receiving terminal 3)

Regarding claim 11, Watanabe teaches the limitation as described in claim 10 above, and further discloses **wherein the network is a point-to-point communication network and the stream of the contents is transmitted continuously** (Pg. 7, Paragraph 0112 teaches sending MPEG system stream in RTP)

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

12. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

13. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Watanabe et al. (US 2001/0004352 A1) in view of Teruhi et al. (US 7327676 B2).

Stein teaches the invention substantially as claimed, including a data receiving terminal, if a received-data of a particular time section received from a data sending terminal does not satisfy a predetermined accumulation quality as the result of discrimination by a received-data quality

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discriminating section, an alternative-data sending requesting section requests a data sending terminal for alternative data. (See abstract)

Regarding claim 5, Watanabe teaches all the limitations of claim 1 as discussed above, however, it fails to explicitly teach **wherein the parameter of the protocol comprises a contents loss rate**.

Teruhi from the same or similar field of endeavor teaches **wherein the parameter of the protocol comprises a contents loss rate** (Fig. 4 teaches format of receiver report that comprises the number of packets lost)

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to use packet loss field of RTCP protocol to calculate content loss rate. One would be motivated to do so to obtain rout quality information. (See Col 6, lines 66-67)

Conclusion

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. All the references listed on 892 are related to the subject matter of adjusting the bit rate of the sending and receiving devices. More specifically, the teachings disclose the use of RTCP protocol parameters to adjust the bit rate.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to WASEEM ASHRAF whose telephone number is (571)270-3948. The examiner can normally be reached on Monday through Friday / 7:30 A.M to 5:00 P.M EST.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Saleh Najjar can be reached on (571) 272-4006. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

WA

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/saleh najjar/

Supervisory Patent Examiner, Art Unit 2155